THE ABC'S OF RURAL INDUSTRY

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This presentation is designed as an introduction to the Rural Industries Program of the Applications and Loans Division of REA. No attempt has been made to cover the many complex problems arising in the rural industries field, but rather to place the program before you and explain briefly some of the most important items, such as:

- 1. What is a rural industry.
- 2. Where should rural industries be encouraged.
- 3. What type of Rural Industries should be encouraged by REA borrowers.
- 4. What does industry look for in selecting a new location.
- 5. What does "rural" mean to industry.
- 6. What does industry mean to the cooperative and to the community.
- 7. What can field personnel do to encourage rural industry development.



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Rural Industries.

Rural Industries as a part of the Applications and Loans Division of the Rural Electrification Administration is not a new program. In 1945 and 1946 when the power-use and member education program was in its development period, Rural Industries was considered as one phase of the program. From that time until January 1, 1951 the Rural Industries Program of REA remained comparatively inactive.

What Is A Rural Industry.

It is extremely difficult to define in concise wording just what is and what is not a rural industry. It is obvious that not all large power consumers of any electric cooperative are rural industries. Large power loads often include such consumers as municipalities, wholesale blocks of power, large farms and lighting loads. Some large and small commercial loads include such consumers as radio and radar stations, cafes, fillings stations, churches, schools, public buildings, and lighting athletic fields. These should not be considered as rural industries. Therefore, it is necessary that a different approach be made to accurately define a rural industry. Rural industries, as applied to the industries of the Rural Industries Program of the Applications and Loans Division of REA, shall be defined as:

A BUSINESS IN A RURAL AREA EMPLOYING RURAL PEOPLE IN WHICH PRODUCTS ARE PARTIALLY OR COMPLETELY PROCESSED, OR IN WHICH

From the above definition, it will be possible in nearly every case to determine whether the establishment served or to be served falls within the scope of a rural industry.

Where Shall Rural Industries Be Encouraged.

Rural industries will benefit any electric cooperative. However, there may be some conditions under which it would not be advisable to actively promote the adding of more rural industries. Acute shortages of power or lack of adequate transmission and distribution facilities might for a time discourage the development of rural industries. It should be kept in mind, however, that the growth of rural industries is not usually very fast and they would not be added quickly or in rapid succession; local conditions will usually change before a sufficient number of rural industries could be added to any one system to cause serious operating difficulties. Cooperatives operating under any or all of the following conditions should be immediately examined to determine whether or not a rural industries program would be of benefit to them.

- 1. Cooperatives with a considerable number of minimum users.
- 2. Cooperatives serving areas where the present labor market is seasonal, or where there is a surplus.
- 3. Cooperatives in which the average KWH consumption per member is low.
- 4. Cooperatives on which the number of idle services are abnormally high or are increasing.

- 5. Cooperatives that are having trouble in completing their area coverage program.
- 6. Cooperatives that are operating with a low or fluctuating load factor.
- 7. The combined effect of several of the above could result in difficulty in meeting debt service.

What Type Of Rural Industries Should Be Encouraged By REA Borrowers.

Almost without exception, any industry would prove valuable to a cooperative. However, there are certain industries due to their size, location and other characteristics that must be carefully studied to determine how and under what conditions they should be served.

When a cooperative is considering the serving of a large industry, it should give serious consideration to the following:

- 1. Large industries often have power requirements beyond the capacity of the existing system or power supply.
- 2. Large industries could easily have power requirements equal to or in excess of the entire system present demand.
- 3. The investment necessary on the part of the electric cooperative to serve certain large industrial loads would create a heavy financial burden on any borrowers.
 - 4. In the event a large industry were to discontinue operation after the present emergency period, an investment on the part of the cooperative would be harmful to

its future operation.

5. Large industries due to their internal organizations and to their heavy demands would not likely to be the most desirable cooperative members.

The types of Rural Industries that should be most actively promoted by REA borrowers are those that:

- 1. Process or manufacture, using locally-produced farm products or natural resources.
- 2. Provide a service or market needed in the community.
- 3. Supply a market demand to the community.
- 4. Employ mostly local rural labor.
- 5. Are locally owned, managed or financed.

Just because a certain community wishes a certain type of industries, does not necessarily mean that that industry could be successfully operated. Only after a careful analysis of all the basic location factors, can an industry be fairly certain of success in any location.

It would appear that a rural industry most likely to be successful, would be one that fills both a definite need in the community and furnishes a market for locally-produced goods. Such an industry could be either a cooperative or a privately financed and managed enterprise.

One must not lose sight of the important fact that for any industry to succeed, there must first be the "know-how"; along with the "know-how" there must be capital, demand for, and ample supply of raw materials.

What Does Industry Look For In The Selection Of A New Location.

Before any existing industries were considering seriously relocating in a new area, they would want to know the facts about 13 basic location factors.

- 1. Location of production materials.
 - a. The raw materials used by the industry are important. If of bulky or perishable nature they cannot be transported long distances.

2. Labor.

- a. Labor must fit the industry. Special training should be carefully noted. Available seasonal labor should also be considered.
- 3. Sites.
 - a. Sites also must fit the industry. Their location in conjuction with the other factors are important.
- 4. Industrial fuels.
 - a. A complete study of the required fuel is necessary.
- 5. Transportation facilities.
 - a. Transportation is more important in some industries than in others.
- 6. Market.
 - industry.

- 7. Distribution facilities.
 - a. Distribution of certain commodities is a highly complex problem.
- 8. Power.
 - a. Important, though not always the deciding factor.
 - b. Continuity of service most important.
- 9. Water.
 - a. Careful analysis of quantity and quality as well as source.
- 10. Living conditions.
 - a. Many times living conditions may be the deciding factor.
- 11. Laws and Regulations.
 - a. Local laws may have vital effect on certain industries.
- 12. Tax structure.
 - a. Not usually important to small rural industries.
- 13. Climate.
 - a. Only for certain industries need climate be considered.

The order of importance of the various location factors will differ with the requirements of different industries.

What "Rural" Mean To Industry.

Rural location to many industries mean a new opportunity.

Except for certain industries whose raw product, market, or other operating characteristics definitely control their location, the rural areas of this country afford advantages. Some of these advantages are:

- 1. Better operating and living conditions.
- 2. Closer to raw materials source.
- 3. Less competition in the labor market.
- 4. Lower overhead.
- 5. For many industries, rural locations also bring them closer to their market; by saving transportation costs on both the finished goods and the raw products.

What Does Industry Mean To The Cooperative And The Community.

Agriculture in itself is an industry. The further the process of local production and processing is carried out, the greater will be that portion of the ultimate profits remaining with the farmer and in the community. With more money to spend it is only logical to expect some increase in the consumption of electricity.

Any rural industry will provide additional employment. It is not unusual to find from 200 to 300 rural people employed in the various small rural industries served by one cooperative. A conservative estimate based on the minimum hourly wage will provide additional yearly revenue to workers of the community ranging from \$288,000 to \$432,000.

The sale of electric energy to 10 or 12 small rural industries could easily account for a sizable portion of the system

total net revenue. This is especially true on systems that are now operating with a poor load factor.

Not only will the electric cooperative benefit from the existence of rural industries but the schools, the Churches and the business men as well. One industry will often attract another. This is especially true where the manufactured product of one industry is used as raw materials for another. An example would be an excelsior mill near a furniture factory. More available money in the hands of the people of a community can mean only one thing, a higher standard of living.

What Can Field Personnel Do To Encourage Rural Industry
Development.

The Rural Industries Program, like any other REA program, will not succeed without the whole-hearted support of all field personnel and all divisions. In order to be specific and to tabulate a few of the things that field personnel can do to promote rural industries, it is necessary that we assume that a location has been selected where not only one of the above-montioned conditions exist but where the management of the cooprative is receptive to and realizes the importance of the program. When such a location has been selected, the following can be done by field personnel to start a rural industry program.

1. Assist the cooperative in making a complete tabulation of industries now being served (tentative Rural Industries Tabulation Form attached).

- 2. Publicize the existing industries by bringing out:
 - a. names of the industries
 - b. products manufactured
 - c. where and how they are used
 - d. amount of locally-produced raw materials used
 - e. number of people employed
 - f. what this employment means to the community, the cooperative and the people
- 3. Survey the area for:
 - a. available labor
 - b. kinds and quantities of raw materials suitable for other new industries
 - c. possible market outlet for manufactured or products produced

(Note: No. 3 above will require close contact with other agencies and information sources, REA Rural Industries Specialist will also be available for consultation.)

- 4. To your regional office:

 Report by special field report, or memorandum, any
 activity or interest on the part of borrowers or
 industry. Give all available details.
- 5. Contact managers and board members of cooperatives in need of industrial growth. Show then by means of the following example what a few small industries will do for the revenue of the system.

(In this example an actual cooperative system can be used. First determine their large power rate and their wholesale power cost.)

| Kind of Industry | KW Denand | Load Factor | KWH Per Month | Revenue Per Month |
|-----------------------|--------------|-------------|------------------|----------------------|
| Flower & Grist Mill | 27 | 30 | 3,200 | \$ 83.50 |
| Lumber Mill | 112 | 15 | 8,000 | 191.50 |
| Excelsior Mill | 50 | 30 | 10,000 | 243.50 |
| Quarry & Line Crusher | 75 | 13 | 7,020 | 169.45 |
| Meat & Veg. Freezer | 50 | 40 | 14,400 | 335.50 |
| | | Total, | 42,620 | \$1,023.45 |

42,620 x 12 = 511,440 KWH per year

including 20% line loss 639,300 KWH per year at co-ops regular power rate of 1.01¢:

 $639.300 \times 1.01\phi = $6,456.00 \text{ cost of power.}$

Revenue per nonth \$1,023.45 x 12 = \$12,281.40

| 1,228.14 | |
|-------------|--|
| 11.053.26 | |
| 6.456.93 | |
| \$ 4,596.33 | |
| | |

Co-op present large power rate: 1st 50 KWH --- .085¢

next 50 KWH --- .045¢

next 2900 KWH ---- .025¢

over 3000 KWH --- .0225¢

6. It is suggested that field personnel do not proceed further without first consulting with their regional office.